

ABSTRACT OF THE DISCLOSURE

A recuperator for transferring thermal energy from a warm gas flow to a cold gas flow, comprising: a first group of ducts with a first connection and a second connection; a second group of ducts with a third connection and a fourth connection, wherein the ducts of both groups extend mutually parallel; a first supply for supplying the cold gas flow to the first connection; a first discharge for discharging the cold gas flow from the second connection; a second supply for supplying the warm gas flow to the third connection; and a second discharge for discharging the warm gas flow from the fourth connection. The device provides temporarily and repeatedly alternating connections from the first supply to the fourth connection; the first discharge to the third connection; the second supply to the second connection; and the second discharge to the first connection. The device further provides a control for repeatedly changing the connections utilizing two alternating valves located at opposite sides of the combination of the first and second group of ducts.